

CLAIMS

What is claimed is:

1. A method of identifying I/O devices in a network comprising:

registering in a service record in a database, a service name corresponding to an I/O device;

appending a unique suffix to the service name identifying the service name as the name of a particular I/O device; and

accessing said I/O device by looking up the registered service name and appended suffix in the database.
2. The method according to claim 1 further comprising storing additional addressing parameters pertaining to the I/O device in other fields of the service record.
3. The method according to claim 2 further comprising sending a request from a host to a subnet manager of the database, said request including parameters enabling all service records pertaining to an I/O device to be returned to the host such that the host has access the I/O device.
4. The method according to claim 3 further comprising identifying all physical paths for the host in the network to said I/O device by examining the response to a single request to the subnet manager of the database.

5. The method of claim 4 wherein the network includes an IOU adapter providing access to the I/O device, and identifying the I/O device includes identifying the IOU adapter such that access to the I/O device does not require polling the IOU adapter.
6. The method of claim 5 wherein the addressing parameters includes indicating that the I/O device is inaccessible such that addressing the I/O device determines that the I/O device is inaccessible without polling the IOU adapter.
7. The method according to claim 2 wherein the network is an Infiniband network.
8. The method according to claim 7 wherein said additional addressing parameters includes the IOCGUID pertaining to the I/O device.
9. The method according to claim 8 wherein the I/O device is an FCP I/O device, and the additional addressing parameters include identifying the corresponding SRP I/O device which provides access to the FCP I/O device.

10. An apparatus for identifying I/O devices in a network comprising:
- a database having a service record for storing a service name corresponding to an I/O device;
 - a unique suffix appended to the service name identifying the service name as the name of a particular I/O device; and
 - a host accessing said I/O device by looking up the registered service name and appended suffix in the database.
11. The apparatus according to claim 10 further comprising additional addressing parameters pertaining to the I/O device stored in other fields of the service record.
12. The apparatus according to claim 11 further comprising a request generator in said host which sends a request to a subnet manager managing said database, said request including parameters enabling all service records pertaining to an I/O device to be returned to said host such that the host has access to the I/O device.
13. The apparatus according to claim 12 wherein said host identifies all physical paths from said host to said I/O device by examining the response to a single request by the host to the subnet manager of the database.
14. The apparatus of claim 13 wherein the network includes an IOU adapter providing access to the I/O device, and wherein said addressing parameters include identifying the IOU adapter such that access to the I/O device does not require polling the IOU adapter.

15. The apparatus of claim 14 wherein said addressing parameters includes indicating that the I/O device is inaccessible such that addressing the I/O device determines that the I/O device is inaccessible without polling the IOU adapter.

16. The apparatus according to claim 11 wherein the network is an Infiniband network.

17. The apparatus according to claim 16 wherein said additional addressing parameters includes the IOCGUID pertaining to the I/O device.

18. The apparatus according to claim 17 wherein the I/O device is an FCP I/O device, and the additional addressing parameters includes identifying the corresponding SRP I/O device which provides access to the FCP I/O device.

19. A program product for identifying I/O devices in a network comprising:

a computer readable medium having recorded thereon computer readable program code performing the method comprising:

registering in a service record in a database, a service name corresponding to an I/O device;

appending a unique suffix to the service name identifying the service name as the name of a particular I/O device; and

accessing said I/O device by looking up the registered service name and appended suffix in the database.

20. The program product according to claim 19 wherein said method further comprises storing additional addressing parameters pertaining to the I/O device in other fields of the service record.

21. The program product according to claim 20 wherein said method further comprises sending a request by a host to a subnet manager of the database, said request including parameters enabling all service records pertaining to an I/O device to be returned to the host such that the host has access the I/O device.

22. The program product according to claim 21 wherein said method further comprises identifying all physical paths for the host in the network to said I/O device by examining the response to a single request to the subnet manager of the database.

23. The program product of claim 22 wherein the network includes an IOU adapter providing access to the I/O device, and wherein said method comprises identifying the I/O device includes identifying the IOU adapter such that access to the I/O device does not require polling the IOU adapter.

24. The program product of claim 23 wherein the addressing parameters includes indicating that the I/O device is inaccessible such that addressing the I/O device determines that the I/O device is inaccessible without polling the IOU adapter.

25. The program product according to claim 20 wherein the network is an Infiniband network.

26. The program product according to claim 25 wherein said additional addressing parameters includes the IOCGUID pertaining to the I/O device.

27. The program product according to claim 26 wherein the I/O device is an FCP I/O device, and the additional addressing parameters include identifying the corresponding SRP I/O device which provides access to the FCP I/O device.

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